

**I. REJECTION OF CLAIM 1 UNDER 35 USC §102(b)**

Claim 1 is rejected under 35 USC §102(b) based on Srinivasan (WO 98/37438).

This rejection is respectfully traversed for at least the following reasons.

Claim 1 refers to an RF coil array including a first coil having an imaging field of view (FOV), and a second coil and third coil combined to span a near identical B field to that of the first coil over the imaging FOV.

The Office Action cites instances in Srinivasan where one coil has a FOV nearly identical to that of the combined FOV of two other coils. (See, e.g., p. 8, Ins. 23-26). However, such passage does not state that there are near identical B fields as recited in claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

**II. REJECTIONS OF CLAIM 1 BASED ON DOUBLE PATENTING**

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting based on claims 3, 28(?) and 32 of Srinivasan (US Patent No. 6,150,816). In addition, claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting based on claim 21 of Srinivasan (US Patent No. 5,680,047). Withdrawal of the rejections is respectfully requested for at least the following reasons.

Claim 1 of the present application recites how the first coil has an imaging field of view (FOV), and the second and third coil combined span a near identical B field to that of the first coil over the imaging FOV. Claims 3, 28(?) and 32 of Srinivasan '816 refer to similar FOVs, but not near identical B fields within the FOVs as recited in claim 1 of the present application. Claim 21 of Srinivasan '047 mentions similar FOVs and not B fields. Moreover, claim 21 is a method claim not an apparatus claim as in claim 1 of the present application.

Accordingly, claim 1 defines a different invention compared to the inventions defined in claims 3, 28(?) and 32 of Srinivasan '816, and claim 21 in Srinivasan '047. Withdrawal of the rejection is respectfully requested.

**III. CONCLUSION**

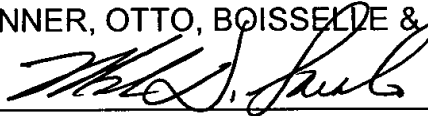
As a result, claim 1 is believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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DATE: September 16, 2002

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.



September 16, 2002

DATE

## APPENDIX

### IN THE DRAWINGS:

Figs. 1a, 2a, 3a and 4a have been amended herein.

### IN THE SPECIFICATION:

Page 3, lines 6-14, the paragraph has been rewritten as follows:

Solenoid The solenoid RF coil looks very similar to that of the conventional solenoid. A two turn solenoid RF coil with two identical value C1 tuning capacitors in series is shown in Figure 10. The inductance of the coil turns along with C1 resonate the coil near the NMR frequency. By adjusting the tuning capacitors C1 and matching the coil across C1 (A) with impedance matching networks (not shown), one can drive the homogeneous mode which can be used to image at the NMR frequency. The B field orientation of this homogeneous mode is along the coil axis, in the Z direction. The points where the dotted line intersects the coil are at virtual ground, they have no net potential (shown with "x" marks).

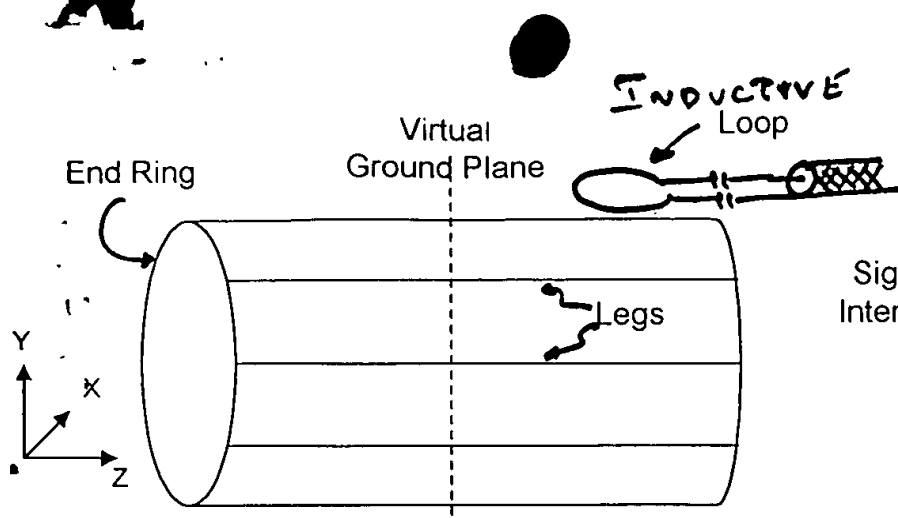


FIGURE 1a Prior Art

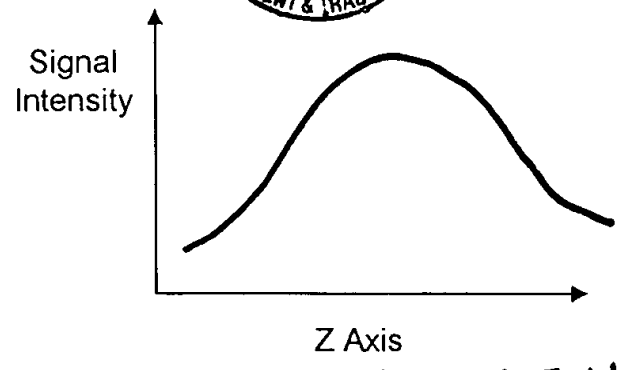


FIGURE 1b

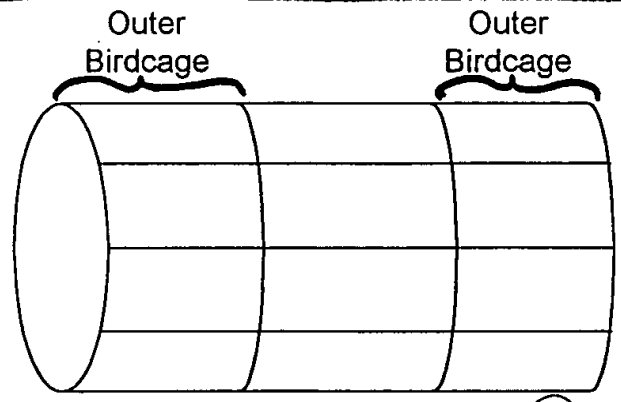


FIGURE 2a Prior Art

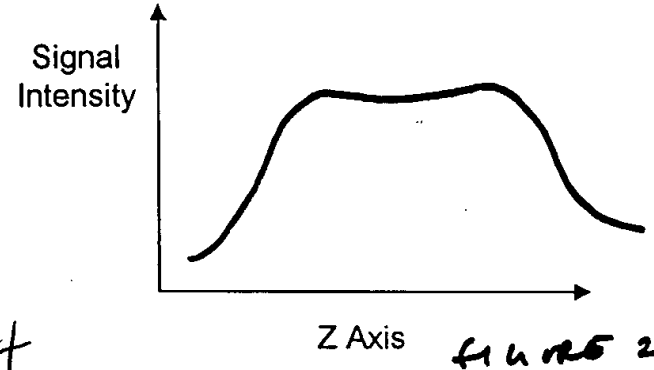


FIGURE 2b

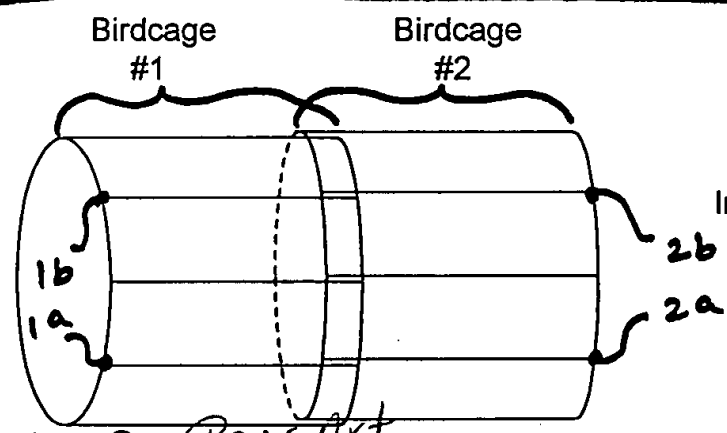


FIGURE 3a Prior Art

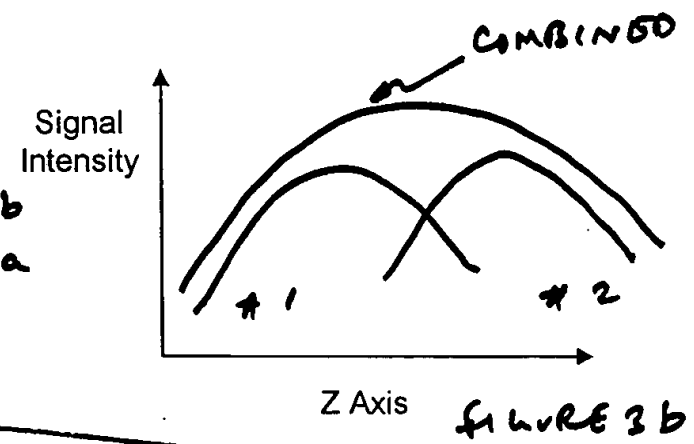


FIGURE 3b

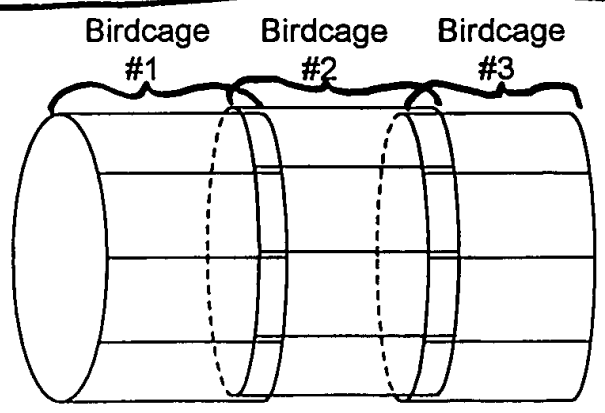


FIGURE 4a Prior Art

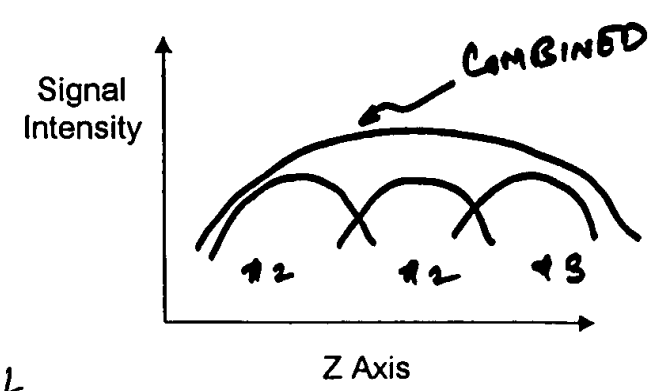


FIGURE 4b